IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Examiner: Yang, Ryan R.

    HAEBERLI   Art Unit: 2672

Application No.: 09/721,437

For: Previewing and Manipulating A   **APPELLANT'S REQUEST FOR**
      Framed Image Print   **REINSTATEMENT OF APPEAL AND**
      .   **AMENDED APPEAL BRIEF**

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P.O. Box 1450
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Sir:

    This Brief is presented in support of a Request for Reinstatement of the Appeal filed

herewith, from the rejection of Claims 1-27 of the above-identified application, as set forth in the

Office Action mailed August 12, 2004.

    There is no fee for the Request for Reinstatement. Please deduct any additional fees or

credit any excess fees associated with the Appeal Brief to Deposit Account 501861. Appendix

A, attached hereto, contains a copy of all claims pending in this case.

REAL PARTY OF INTEREST

The Real Party of Interest is Shutterfly Inc., a Delaware corporation.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

STATUS OF CLAIMS

Claims 1-27 are pending and are the subject of this Appeal. All claims have been rejected. Claims 1-27 are the subject of this appeal. No other claims are pending.

STATUS OF AMENDMENTS

The claims were amended in response to an Office Action mailed in February 2003. A Final Office Action was mailed on April 26, 2004. An Appeal Brief was filed May 27, 2004, and an Office Action mailed August 12, 2004 raised new grounds of rejection. An Appeal Brief was filed October 21, 2004, and an Office Action mailed June 6, 2005 reopened with a new ground of Rejection. The June 6 2005 Office Action noted that the Office Action is issued to correct a typographical error in the August 12, 2004 Office Action and an additional rejection is made on claim 10. Applicants respectfully traverse the rejections and request reinstatement of the Appeal.

A copy of all the pending claims, prior to the after final amendment, is provided in Appendix A attached hereto.

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SUMMARY OF THE INVENTION

In one aspect the invention provides a method of generating a frame prototype image showing a picture image framed within a frame. The method includes providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame; mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image wherein the perspective frame image is not shown in a head-on view; and providing an enhanced edit set along with the frame image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view. (Application at pages 2-3).

One or more of the following advantages may be provided. The systems and methods described herein provide a more realistic presentation of an image based product. The image based product can be an image in a frame. Other image based products such as photocards, greeting cards, t-shirts, mugs, and other novelty items can also be displayed using a perspective view that enhances the appeal of the product. The user's perspective frame view can be enhanced by lighting and other effects and displayed in an environment to help simulate the appearance of the image-based product in various settings. The user can apply one or more enhancing features to the image while displayed in the environment. Effects can be applied to the image, producing a resultant image that can be provided in a perspective view in the environment. The framed image can be manipulated to change its position, orientation, or size. (Application at page 5).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. WHETHER CLAIMS 1-9, 11, 18 AND 26 ARE PATENTABLE OVER OLES (6,047,130) AND TEO (6,064,399)

II. WHETHER CLAIM 10 IS PATENTABLE UNDER SECTION 103(A) OVER OLES, TEO AND KURASHIGE (5,282,262)

III. WHETHER CLAIMS 12-17, 19-22 AND 24-25 ARE PATENTABLE UNDER SECTION 103(A) OVER OLES, TEO AND OBERG (5,870,771).

IV. WHETHER CLAIM 23 IS PATENTABLE OVER OLES, TEO, OBERG AND FREEMAN (6,356,288).

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V.   WHETHER CLAIM 27 IS PATENTABLE OVER OLES, TEO AND MORRIS
      (6,453,361).

VI.   WHETHER CLAIMS 10 AND 12 COMPLY WITH SECTION 112
      REQUIREMENTS.

ARGUMENT

CLAIMS 1-9, 11, 18 AND 26 ARE PATENTABLE OVER OLES AND TEO

Claims 1-9, 11, 18 and 26 were rejected under Section 103(a) as unpatentable over Oles
and further in view of Teo. Oles discloses a photographic camera synchronized to a video
camera with a computer and viewing monitors that allows professional photography customers to
visually determine the appropriate size of a portrait photograph and matching picture frame by
displaying upon a viewer a perspective view of a video image of the photographic image and the
matching picture frame within a simulated room image. Teo discloses a method and system for
constructing a panoramic image including the steps of applying panoramic curvature to at least
one image, thereby to create a panoramic background embedding in the panoramic background
an additional image having a geometry other than that of the panoramic curvature thereby to
provide a composite panoramic image containing an embedded image corresponding to the
additional image and whose geometry matches that of the panoramic background.

In Oles, all appearances used "size perspective" for video image. Column 2 line 1 of
Oles states "The present invention overcomes these deficiencies by providing a method and
apparatus that allows a customer to visually determine the appropriate size of a portrait
photograph and matching picture frame by displaying upon a portrait display viewer a
perspective view of a combined video image of the photograph and the matching frame within a
simulated room image." Further, Column 5 line 31--35: "The present invention as depicted in
FIG. 5 allows the customer or operator to change the perspective of the video image (**and the
size of the resulting portrait**) as well as move and position the combined image within the
simulated room setting image." This is further supported by the fact that all Oles figures show a
frontal view of the picture. The fact that the monitor showing the simulated picture(s) is shown

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in a 3D perspective view further supports the contention that the "perspective view" in Oles is not the perspective view as claimed.

In sum, the "perspective" term in Oles relates to the "size of the resulting portrait" and includes the frame image shown in a head-on view. In contrast, each of the independent claims recites <u>wherein the frame image is not shown in a head-on view</u>. In one embodiment of the present invention, a discussion of the "perspective view" is provided on page 6 as follows:

A "perspective frame image" is an image that shows an in-perspective view of a frame. In other words, <u>the frame in such a perspective frame image is not shown in a head-on view</u>. For example, a frame can be arranged in a typical scene in which the frame might be displayed (e.g., on a table) and then a digital camera can be used to capture a perspective image of the frame as it appears in the scene. Also, a white piece of paper (or other suitable material) can be mounted in the frame where an image print would be displayed. As a result, the perspective frame image will include a white region located where an image print would be visible in the frame (also referred to here as the "picture area"). An example of such a perspective frame image 300 having a picture area 302 is shown in FIG. 3A.

Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the Johnson et al. reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference Fredlund so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991).

As shown above, Oles only shows a head-on view rather than the claimed <u>wherein the frame image is not shown in a head-on view</u>. Applicant respectfully submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails to show all claim limitations.

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Applicants traverse the unpatentable rejection over Oles singly or in combination with Teo. Teo shows a method and system for embedding images and video segments within a panoramic image of a scene, so as to maintain the proper perspective. However, Teo deals with panoramic images of scenes used to provide a viewer with an immersive surround experience, as if the viewer was standing in the center of a scene gazing in several directions. Panoramic images can be produced by taking multiple snapshots of a scene, as a camera is rotated horizontally and possibly also vertically. The snapshots are joined together and projected onto an appropriate geometrical surface, such as a cylinder or sphere, to reproduce an omniview effect. Applying Teo to Oles would not result in an **operable** system as the projection of the picture image in Oles onto a cylinder or sphere would severely distort the image. Hence, the combination of Oles and Teo would not be operable. Further, there is no motivation to combine the omniviewing system of Teo to Oles.

Additionally, **Oles and Teo fail to show at least the claimed "providing an enhanced edit set including user manipulable tools for editing either the picture or the frame in the perspective view."** Oles shows no such enhanced edit set. Oles' Fig. 3 description is reproduced below:

> FIG.3 illustrates the operator using the present invention to view the selected video image 24 within the selected picture frame image 26. The selected video image is initially transposed as a 5"x7" image on video portrait viewer 20 with the operator being able to manipulate or post-process the video image in a variety of ways including reducing or enlarging the image, rotating the image, or repositioning the image on the video portrait viewer 20. The present invention includes previously stored images of picture frames available for viewing so that the operator can go through the picture frame images to find one suitable for the portrait. Essentially, the present invention incorporates a picture frame catalog within its storage system, with the further ability to combine the selected video image 24 with the selected picture frame image 26 to form a combined image as depicted in FIG. 3. The present invention allows a photographer to show the customer every existing style and color of picture frame available. The customer is then able to select from the many styles and types of picture frames that will best complement and display the portrait. All of the present invention's post processing capability is available for use on the combined picture frame image and video image.

Oles describes item 22 as "Option menu 22 provides user access to all of the functions of the present invention such as reducing or enlarging the selected video image." However,

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nowhere in Oles does it show specifically the "providing an enhanced edit set including user manipulable tools for editing either the picture or the frame" in the perspective view (wherein the frame image is not shown in a head-on view) as discussed above. Here, Oles shows a 2D rendering of the picture or the frame from a frontal view. It does not show user manipulable tools for editing either the picture or the frame in the perspective view.

Applicants respectfully traverse the Section 102 rejection. Per MPEP Section 706.02, for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Here, Oles shows neither the perspective view nor the tools to edit the picture or the frame in the perspective view.

In sum, Oles and Teo cannot anticipate claim 1 since it fails at least one claimed element. Thus, the independent claims and those dependent therefrom are patentable over Oles and Teo. Withdrawal of the Section 103 rejection is respectfully requested.

UNDER SECTION 103(A), CLAIM 10 IS PATENTABLE OVER OLES, TEO AND KURASHIGE, CLAIMS 12-17, 19-22 AND 24-25 ARE PATENTABLE OVER OLES, TEO AND OBERG, CLAIM 23 IS PATENTABLE OVER OLES, TEO, OBERG AND FREEMAN, AND CLAIM 27 IS PATENTABLE OVER OLES, TEO AND MORRIS

Claim 10 was rejected under Section 103(a) over Oles and Kurashige (5,282,262). Claims 12-17, 19-22 and 24-25 were rejected under Section 103(a) as unpatentable over Oles and Oberg (5,870,771). Claim 23 was rejected as unpatentable over Oles, Oberg and Freeman (6,356,288). Claim 27 was rejected as unpatentable over Oles and Morris (6,453,361).

First, Appellant notes that references can not be arbitrarily combined. There must be some reason why one skilled in the art would be motivated to make the proposed combination of references. *In re Nomiya*, 184 U.S.P.Q. 607 (CCPA 1975).

Additionally, these claims are allowable as they depend from allowable claim 1. Further, none of the references show the specifics of the dependent claims. To illustrate, as to claim 10, neither Oles, Teo nor Kurashige show displaying of the image and frame in the perspective view and the user manipulable tools for editing either the picture or the frame in the perspective view. Kurashige relates to a hardware apparatus for transforming a two-dimensional input video signal onto a three-dimensional surface and for depicting illumination thereof by a spot light source transforms the two-dimensional video signal in accordance with a mapping data signal onto the

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three-dimensional surface. However, there is no specifics of displaying of the image and frame in the perspective view and the user manipulable tools for editing either the picture or the frame in the perspective view, and there is no suggestion of combining Kurashige with Oles. Withdrawal of the rejection of claim 10 is requested.

To further illustrate, as to claims 12-17, 19-22 and 24-25, Oberg does not show providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame. The frame molding 62 shown in FIG. 3 is shown as a top view, indicating that it is NOT a perspective view but a 2D top view. Further, the superimposition operation mentioned in Oberg is consistent with the 2D top view since in a 2D view, differing layers only need to be super-imposed to provide a combined view.

Moreover, Oberg fails to show the "providing an enhanced edit set along with the frame image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view." Here, Oberg's column 6, line 1-6 shows the image editing software and, as discussed above, Oberg does not show the perspective view. However, Oberg is absolutely devoid of the claimed specifics of an **enhanced edit set along with the frame image**, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view. Oberg is completely silent on where the editing set is placed relative to the frame image. Oberg's Fig. 3 shows only the frame and nothing else. Withdrawal of the rejection of claims 12-17, 19-22 and 24-25 is requested.

Claim 27 was rejected under Section 103(a) as unpatentable over Oles, Teo and Morris (6,453,361). Morris relates to an online system with a server for communicating with both client devices and photo-sharing web sites over a network.

Applicants respectfully traverse the rejection of claim 27. Here, neither Oles nor Morris shows instructions to provide a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame; map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and provide an enhanced edit set along with the frame image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view. Hence, claim 27 is patentable over Oles and Morris for each of these reasons.

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Secondly, Applicants note that no motivation or suggestion, either in the cited art reference or in the knowledge generally available to one of ordinary skill in the art, has been cited by the Examiner to modify the Oles reference with Oberg so as to produce the claimed invention. Further, Applicants fail to identify any motivation to modify the reference teaching so as provide uploading of images that were edited and/or previewed in the perspective view arrangements as presently claimed. Applicants point out that the Examiner bears the initial burden of factually establishing and supporting any *prima facie* conclusion of obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976); M.P.E.P. § 2142. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness. *Id.* In the instant case, the Examiner has not pointed to any evidence in Morris, or how knowledge of those skilled in the art, provide a suggestion or motivation to modify the reference teaching so as to produce the claimed invention of claim 27. See *In re Zurko*, 59 U.S.P.Q.2d 1693 (Fed. Cir. 2001) ([I]n a determination of patentability .... the Board cannot simply reach conclusions based on its understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings).

Under *Vaeck*, absent any evidence of a cited suggestion or reasonable motivation in either Oles, Kurashige, Oberg or Morris reference, or knowledge of those skilled in the art, to provide a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame; map the picture image to the picture portion of the frame image in order to generate the frame prototype image; and provide an enhanced edit set along with the frame image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view, and to upload the resulting image to a server, *prima facie* obviousness of the claims has not been established. As such, it is respectfully requested that the § 103(a) rejection of all claims be withdrawn.

VII.   CLAIMS 10 AND 12 COMPLY WITH SECTION 112 REQUIREMENTS.

The Office Action rejected claim 10 as failing to comply with the enablement requirement: "The specification teaches the illumination of the white piece of paper is used to

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illuminate the texture-mapped picture image[. H]owever, the specification does not explain how this is done."

Applicants respectfully traverse the assertion. Pages 7-8 of the instant Specification is detailed as follows:

> FIG. 4 is flow diagram of a process 400 of texture mapping a picture image onto the picture area of a perspective frame image. First, picture image coordinates are assigned to each of the vertices of the picture area (block 402). The vertices of the picture area can be identified using the mat. For example, coordinates associated with each of the four corners of the picture image can be assigned to respective corners of the picture area. These coordinates index the picture image. Next, the coordinates are interpolated across the polygon to determine, at each of the picture area's pixels, a texture value (block 404). This texture value is then multiplied by the original value of that pixel (block 406). In this way, the illumination of the white piece of paper used in the perspective frame image is used to illuminate the texture-mapped picture image in the final frame preview image. This tends to cause the resulting frame preview image to look more realistic. For example, reflections caused by glass that typically covers a framed image print tend to reduce the contrast of the image print when viewed through the glass. Multiplying the texture value by the original value of the pixel reduces the contrast of the texture-mapped picture image in a manner that reproduces this effect.

One skilled in the art is taught that the mapping the picture image to the picture portion of the frame image includes mapping the picture image to the picture portion of the frame image using the illumination of the picture portion of the frame image. Withdrawal of the Section 112 rejection is requested.

As to the rejection on claim 12, Applicants fail to note the antecedent basis complained thereof and respectfully traverses the rejection.

CONCLUSION

Appellant believes that the above discussion is fully responsive to all grounds of rejections set forth in the Office Action. Withdrawal of all rejections is respectfully requested.

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Respectfully submitted,

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Reg. 37,955

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APPENDIX A
COMPLETE SET OF PENDING CLAIMS

1. A method of generating a frame prototype image showing a picture image framed within a frame, the method comprising:

   providing a frame image showing the frame in a perspective view, the frame image having a picture portion corresponding to the portion of the frame used to view a picture mounted in the frame;

   mapping the picture image to the picture portion of the frame image in order to generate the frame prototype image wherein the perspective frame image is not shown in a head-on view; and

   providing an enhanced edit set along with the frame image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view.

2. The method of claim 1, further comprising identifying a picture portion of the frame image.

3. The method of claim 2, wherein identifying the picture portion of the frame image includes providing a mat identifying the picture portion of the frame image.

4. The method of claim 3, wherein the mat includes a plurality of pixels, each pixel having a pixel value.

5. The method of claim 4, wherein identifying the picture portion of the frame image includes setting each pixel in the mat that corresponds to the picture portion of the frame image to a first pixel value.

6. The method of claim 2, wherein identifying the picture portion of the frame image includes identifying the outer perimeter of the picture portion of the frame image.

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7.   The method of claim 1, wherein the picture portion of the frame image has a quadrilateral shape and the method further includes identifying the picture portion of the frame image including identifying the four corners of the picture portion.

5   8.   The method of claim 1, further comprising displaying the frame prototype image.

9.   The method of claim 1, wherein mapping the picture image to the picture portion of the frame image includes texture mapping the picture image to the picture portion of the frame image.

10.   The method of claim 1, wherein the mapping the picture image to the picture portion of the frame image includes mapping the picture image to the picture portion of the frame image using the illumination of the picture portion of the frame image.

11.   The method of claim 1, wherein the frame image is captured using a digital camera.

12.   The method of claim 1 wherein the enhanced image set includes a cropping tool and the method includes

cropping the picture in accordance with user instructions; and

presenting the cropped picture in the picture portion of the frame image.

13.   The method of claim 1, wherein the enhanced image set includes a border tool and the method includes

adjusting the border of the picture in accordance with user instructions; and

presenting the picture including new border in the picture portion of the frame image.

14.   The method of claim 1, wherein the enhanced image set includes an effects tool and the method includes

applying an effect to the picture in accordance with user instructions; and

presenting the picture including selected effect in the picture portion of the frame image.

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15.　　The method of claim 14, further comprising selecting the effect from the group consisting of black & white, soft focus, color tone and saturate.

16.　　The method of claim 14, wherein the effect applied is color tone and the method further comprises　　　:
receiving color tone adjustment data and presenting a color tone adjusted picture in the picture portion of the frame.

17.　　The method of claim 1, wherein the enhanced image set includes a rotation tool and the method includes
rotating the frame in accordance with user instructions; and
presenting the rotated framed in the framed image.

18.　　The method of claim 1, wherein the enhanced image set includes a rotation tool and the method includes
rotating the picture image in the frame in accordance with user instructions; and
presenting the rotated picture image in the frame of the framed image.

19.　　The method of claim 1, wherein the enhanced image set includes a border tool and the method includes
receiving a border width selection;
adjusting the border width of the picture image in accordance with the border width selection; and
presenting the picture image including adjusted border in the framed image.

20.　　The method of claim 1, wherein the enhanced image set includes a frame adjustment button and the method includes
receiving a frame size selection;
changing a size of the frame in the perspective view in accordance with the frame size selection;
mapping the picture image to a picture portion of the new size frame; and
presenting the picture image in the framed image.

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21. The method of claim 1, wherein the enhanced image set includes a trimming tool and the method includes

trimming the picture image in accordance with user instructions; and

presenting the trimmed picture image in the frame of the framed image.

22. The method of claim 1, wherein the enhanced image set includes a delight me tool and the method includes

activating the delight me tool upon user request;

automatically selecting a feature or effect to apply to the framed image;

applying the selected feature to the framed image; and

presenting the framed image.

23. The method of claim 22, wherein the step of automatically selecting a feature includes randomly selecting a feature.

24. The method of claim 22, wherein the step of automatically selecting a feature or effect includes selecting a feature or effect to apply to the picture image.

25. The method of claim 22, wherein the step of automatically selecting a feature or effect includes selecting a feature or effect to apply to the frame.

26. A computer program product tangibly embodied in a computer-readable medium, for generating a frame prototype image showing a picture image framed within a frame, comprising instructions operable to cause a computer to:

receive the picture image;

store a frame image showing the frame in a perspective view and a mat identifying the picture portion of the frame image;

map the picture image to the picture portion of the frame image in order to generate the frame prototype image wherein the frame image is not shown in a head-on view; and

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provide an enhanced edit set along with the frame prototype image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view.

27. A system for generating a frame prototype image showing a picture image framed within a frame, the system comprising:

a client computer in communication with a computer network;

a server, in communication with a computer network, having server software embodied in a computer-readable medium, the server software comprising instructions operable to cause the server to:

receive the picture image from the client computer;

store a frame image showing the frame in a perspective view and a mat identifying the picture portion of the frame image;

map the picture image to the picture portion of the frame image in order to generate the frame prototype image wherein the frame image is not shown in a head-on view; and

present an enhanced edit set along with the frame prototype image, the enhanced edit set including user manipulatable tools for editing either the picture or the frame in the perspective view; and

wherein the client computer includes client software embodied in a computer-readable medium, the client software comprising instructions operable to cause the client computer to upload the picture image to the server.

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